## (19) World Intellectual Property Organization International Bureau





### (43) International Publication Date 19 December 2002 (19.12.2002)

## PCT

## (10) International Publication Number WO 02/101422 A3

G02B 6/02 (51) International Patent Classification7:

(21) International Application Number: PCT/KR02/01109

(22) International Filing Date: 12 June 2002 (12.06.2002)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data: 2001/33141

13 June 2001 (13.06.2001)

(71) Applicant (for all designated States except US): SAM-SUNG ELECTRONICS CO., LTD. [KR/KR]; 416, Maetan-3 Dong, Paldal-Gu, Suwon 442-742 (KR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): PARK, Joon, Yong [KR/KR]; 293-1 Imun-1 Dong, Dongdaemun-Gu, Scoul 130-081 (KR).

(74) Agent: KIM, Hak, Je; Kwangwhamoon P.O.Box 1828, Seoul 110-618 (KR).

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

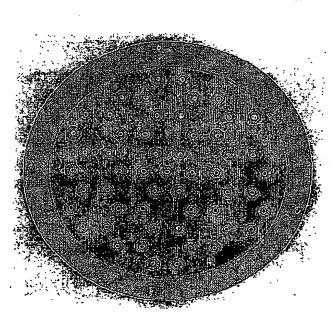
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR). OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of *amendments*
- (88) Date of publication of the international search report: 13 March 2003

For two-letter codes and other abbreviations, refer to the "Guid-(81) Designated States (national): AE, AG, AL, AM, AT, AU, ance Notes on Codes and Abbreviations" appearing at the begin-AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, ming of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR FABRICATING OPTICAL FIBER PREFORM USING EXTRUSION DIE



(57) Abstract: Disclosed is a method of fabricating a photonic crystal fiber preform using an extrusion die, comprising the step of extruding a first optical material into a comtinuous phase, and a second optical material into a plurality of dispersed phases to axially orient the dispersed phases.

# INTERNATIONAL SEARCH REPORT

iational application No. PCT/KR02/01109

		<u> </u>	
A. CLASSIFICATION OF SUBJECT MATTER			
IPC7 G02B 6/02			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)			
IPC7 G02B 6/02			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Korean Patents and applications for inventions since 1975			
Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)			
IEL .			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.
A	T.A.Birks et.al., Dispersion Compensation Using Single-Material Fibers', In:IEEE Photonics Technology Letters, Vol.11, No.6, JUNE 1999, pages 674-676 See whole document		1
Α ,	S.E.Barkou et.al., 'Dispersion properties of photonic bandgap guiding fibers', In:Optical Fiber Communication Conference, 1999, and the International Conference on Integrated Optics and Optical Fiber Communication.OFC/IOOC '99. Technical Digest, Vol 4, Pages 117-119 See whole document		1
, , , , , , , , , , , , , , , , , , , ,			
		:	
Fuetbar	documents are listed in the continuation of Roy C	See patent family annex.	
"A" document defining the general state of the art which is not considered to be of particular relevence		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"L" document cited to e	t which may throw doubts on priority claim(s) or which is stablish the publication date of citation or other	step when the document is taken alone "Y" document of particular relevence; the claimed invention cannot be	
•	•		hen the document is iments, such combination
means "P" document published prior to the international filing date but later "8 than the priority date claimed		being obvious to a person skilled in the art "&" document member of the same patent family	
Date of the actual completion of the international search Date		Date of mailing of the international search report	
31 DECEMBER 2002 (31.12.2002)		31 DECEMBER 2002 (31.12.2002)	
Name and mailing address of the ISA/KR Autho		Authorized officer	
	Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea	JEONG, So Yeon	
Faccimile No.	82-42-472-7140	Telephone No. 82-42-481-5656	